calculating correction data corresponding to the other output apparatus on the basis of the output characteristics data of the reference output apparatus and the output characteristics data of the other output apparatus;

managing the calculated correction data corresponding to each of the output apparatus; and

updating the correction data corresponding to the other output apparatus according to a revision of the output characteristics data of the reference output apparatus.

REMARKS

Claims 1-10 remain in this application . Claims 1, 3-7, 9 and 10 have been amended to define still more clearly what Applicant regards as his invention, in terms which distinguish over the art of record. Claims 1, 7, 9 and 10 are independent.

Claims 1, 2, 4 and 6-9 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent 6,046,820 (Konishi), and Claims 3 and 5 were rejected under 35 U.S.C. § 103(a) as being obvious from *Konishi '820* in view of U.S. Patent 5,950,036 (Konishi)

The present invention is directed to the alleviation or elimiantion of a problem that has become more widespread in recent years with the increasingly common practice of transmitting iamges in the form of signals from one apparatus to another for printing out as a hard copy (for exmple). When this is done, because the characteristics of a given type of printer will not in general be identical to those of anoteh type, the resulting hard copy may dep[end upont he type or brand of printer used. In addition, as explained in

the applicaiton, the charactgeristics of a given printer may themselves change over time, as the printer experiences the wearing down of parts, etc., and may in any event vary over time due to fluctuations in ambient temperature, or humidity, etc.

It has been known to conduct a color calibration procedure on a printer (indeed, both *Lonishi* patents applied against the claims exemplify this technique). The present inveniton, in the aspects set out in the respective independent claims, addresses this problem by matching the color of an output apparatus with the color of a *reference* output apparatus, and in this manner can match the color-reproduction characteristics of two or more output apparatuses.

Independent Claim 1 is directed to an image processing image processing method, in which there is input output characteristics data corresponding to each of a plurality of output apparatus that output an image, including a reference output apparatus. Correction data corresponding to the other output apparatus is calculated on the basis of the output characteristics data of the reference output apparatus and the output characteristics data of the other output apparatus, and the calculated correction data corresponding to each of the output apparatus is managed. The correction data corresponding to the other output apparatus is updated according to a revision of the output characteristics data of the reference output apparatus.

It should be noted that the present invention is *not* provided only to execute calibration independently in each of two or more output apparatus. This fact is clear from the following recited step:

"calculating correction date corresponding to the other output apparatus on the basis of the output characteristics data of the reference output apparatus and the output characteristics data of the other output apparatus".

An approach like that of the prior art, where calibration is performed independently in each output apparatus, does not use output characteristics data of a *reference* output apparatus for the calculation of correction data, as is done in the method of Claim 1.

Furthermore, the Examiner's attention is directed to the following step, also recited in Claim 1:

"updating the correction data corresponding to the other output apparatus according to a revision of the output characteristics data of the reference output apparatus"

According to this step, the color of other output apparatus can be matched with the color of the reference output apparatus irrespective of change over time.

Using technology where calibration is performed independently in each output apparatus, as in *Konishi '820*, the revision of the output characteristics data of one output apparatus does not relate to calibration of the other output apparatus.

Konishi '820 (and for that matter *Konishi '036*) relate to systems of the prior-art type mentioned above, in which calibration is simply performed independently for each apparatus or output unit. Col. 7, lines 44-47, of *Konishi '820*, cited by the Examiner, states that it is possible to adapt the *Konishi '820* invention to a system containing two or more devices. This statement, however, merely teaches that each of plural devices calibrates independently -- that is, the *Konishi '820* approach of each apparatus calibrating

independently of all the others, can be applied to two apparatus (i.e., have each calibrate independently of the other) as well as to just a single apparatus that is to be calibrated.

Moreover, Applicant notes the method of correction data set out in Fig. 6 and col. 6, lines 21-57, of *Konishi '820*, where correction data is crated for correcting color-reproduction characteristics linearly, as shown in Figs. 2-4. This is not believed to teach or suggest using output characteristics data of a reference output apparatus, as recited in Claim 1.

For these reasons, it is believed clear that Claim 1 is alowable over *Konishi '820*, and even if *Konishi '036* is deemed to show all that it is cited for in the Office Aciton, such would not remedy the deficiencies of *Konishi '820* as prior art against Claim 1.

The other independent claims are each apparatus, computer memory medium, and program claims respectively corresponding to method Claim 1, and are believed to be patentable for at least the same reasons as discussed above in connection with Claim 1.

A review of the other art of record has failed to reveal anything which, in Applicant's opinion, would remedy the deficiencies of the art discussed above, as references against the independent claims herein. Those claims are therefore believed patentable over the art of record.

The other claims in this application are each dependent from one or another of the independent claims discussed above and are therefore believed patentable for the same reasons. Since each dependent claim is also deemed to define an additional aspect of

the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

This Amendment After Final Action is believed clearly to place this application in condition for allowance and its entry is therefore believed proper under 37 C.F.R. § 1.116. In any event, however, entry of this Amendment After Final Action, as an earnest effort to advance prosecution and reduce the number of issues, is respectfully requested. Should the Examiner believe that issues remain outstanding, she is respectfully requested to contact Applicant's undersigned attorney in an effort to resolve such issues and advance the case to issue.

In view of the foregoing amendments and remarks, Applicant respectfully requests favorable reconsideration and early passage to issue of the present application.

Applicant's undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,

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VERSION MARKED TO SHOW CHANGES TO CLAIMS

1. (Twice Amended) An image processing method comprising the steps of:

inputting output characteristics data corresponding to each of a plurality of output apparatus[es] that output an image, including a reference output apparatus;

calculating correction data corresponding to the other output apparatus on the basis of the output characteristics data of the reference output apparatus and the output characteristics data of the other output apparatus; [and]

managing the calculated correction data corresponding to each of the output [apparatuses,] apparatus; and

[wherein, in association with a revision of the output characteristics data of the reference output apparatus,] updating the correction data corresponding to the other output apparatus [is revised on the basis of the revised] according to a revision of the output characteristics data of the reference output apparatus.

3. (Amended) A method according to claim 1, wherein the output characteristics data of said reference output apparatus is derived by measuring a color of an image formed by an image signal corrected on the basis of the correction data formed by a calibration process, after completion of [said] that calibration process.

4. (Amended) A method according to claim 1, further comprising the step of setting a designation of one of said output apparatus as said reference output apparatus.

5. (Amended) A method according to claim 1, further comprising the step of setting a designation of plural output apparatus as said plurality of output apparatuses on the basis of an instruction of the user.

6. (Amended) A method according to claim 1, further comprising the steps of:

transmitting said correction data to a client computer; and

the client computer correcting input image data on the basis of said correction data[by said client computer].

7. (Twice Amended) An image processing apparatus which can communicate to a plurality of output apparatus[es] that output an image, including a reference output apparatus, said image processing apparatus comprising:

an input unit, adapted to input output characteristics data of each output apparatus of said plurality of output apparatus that output an image, including the reference output apparatus;

a correction processor, adapted to calculate correction data corresponding to the other output apparatus, for use in a correcting process to be applied to image data by using the calculated correction data[according to the output apparatus];

[an input unit, adapted to input output characteristics data of each output apparatus of said plurality of output apparatuses that output an image, including the reference output apparatus;]

a management unit, adapted to manage the calculated correction data corresponding to each of the output apparatus[es]; and

a revision unit, adapted to [revise] update the correction data corresponding to the other output apparatus [on the basis of the output characteristics data of the reference output apparatus and] according to a revision of the output characteristics data of the other output apparatus.

9. (Twice Amended) A memory medium in which a program for an image processing method has been stored, wherein said program comprises the steps of:

inputting output characteristics data corresponding to each of a plurality of output apparatus[es] that output an image, including a reference output apparatus;

calculating correction data corresponding to the other output apparatus on the basis of the output characteristics data of the reference output apparatus and the output characteristics data of the other output apparatus; [and]

managing the calculated correction data corresponding to each of the output [apparatuses,] apparatus; and

[wherein, in association with a revision of the output characteristics data of the reference output apparatus,] updating the correction data corresponding to the other output apparatus [is revised on the basis of the revised] according to a revision of the output characteristics data of the reference output apparatus

10. (Amended) A computer program for an image processing method comprising:

inputting output characteristics data corresponding to each of a plurality of output apparatus[es] that output an image, including a reference output apparatus;

calculating correction data corresponding to the other output apparatus on the basis of the output characteristics data of the reference output apparatus and the output characteristics data of the other output apparatus; [and]

managing the calculated correction data corresponding to each of the output [apparatuses,] apparatus; and

[wherein, in association with a revision of the output characteristics data of the reference output apparatus,] updating the correction data corresponding to the other output apparatus [is revised on the basis of the revised] according to a revision of the output characteristics data of the reference output apparatus.